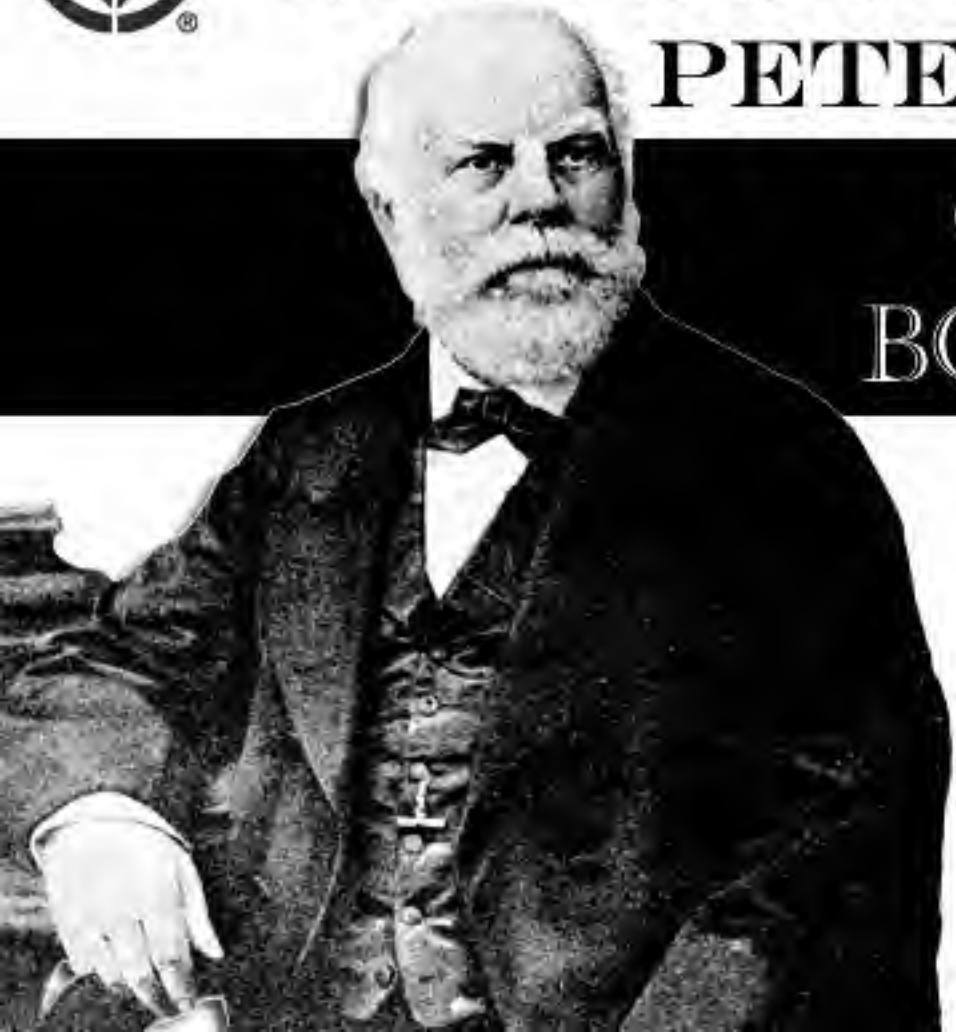




MISSOURI BOTANICAL GARDEN

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19-98 Nov & Dec 1860

114 - 843 Jan - Sept 1861

947 - 1489 April - Dec 1862

1660 - 2037 ^{Appar. November} March - Oct 1863

"*longiglanda*?"

19. San Luis Obispo, - Nov. Trees with craggy habit. Thorn on the hilltop covered with trailing hickory bark thick, leaves variable.



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6361

Agrostis muralis

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thin and
thin grass growing on walls. Found
with no name, with hair mixed with it.



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-978. n.
chrysolepis

Apr. 15¹⁸⁶² Rocky ridge. Small tree 30 ft.
nigra.
neansorosa Gilj



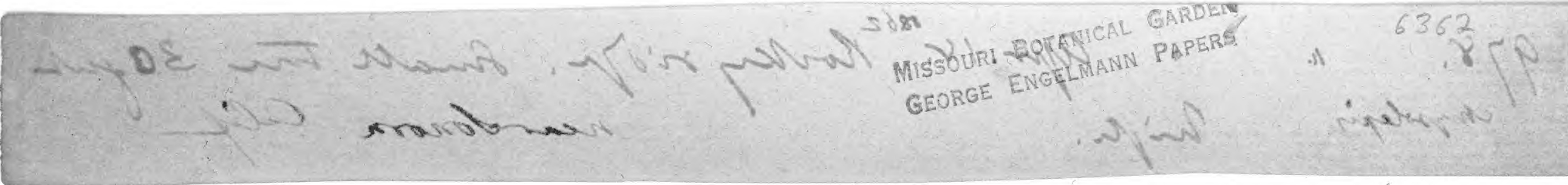
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Wheat Creek Q. Trinidi, seven trees measured as follows.

May 1-1862

15 ft.-12 ft.-16 ft. 1 in.-16 ft. 2 in.- $13\frac{1}{2}$ ft.-14 ft.-15 ft. 2 in.



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Cobata Q. Hinddii. — Many on plain near ^{most likely May 1862} camp
measured as follows. — 14 $\frac{1}{2}$. 16 $\frac{1}{2}$. 16 $\frac{1}{2}$. 15 $\frac{1}{2}$.
18 $\frac{3}{4}$. 18 $\frac{1}{2}$. 17 $\frac{1}{2}$. 17 $\frac{1}{2}$. Bark seen 5 $\frac{1}{4}$ in. thick.



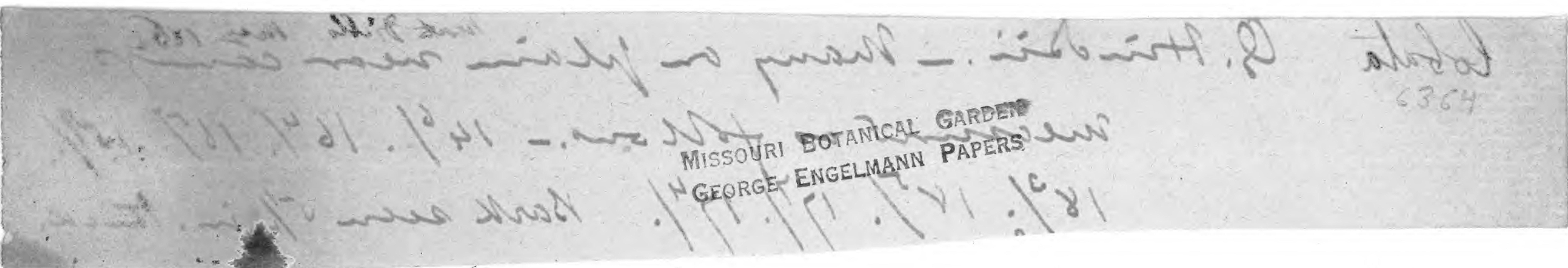
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shaded

6364



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G. willow? (willow leaved.) Few in dry places in
montane forest
May 1862 valleys, but often on hills. A swampy
tree, often 2 ft. in girth. The most
tandy was in gaps just showing their
leaves 27 May.



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Leaves in wh. (white willow) tip sharp
oval with a sharp red yellow
tip in tip sharp
with pointed tip in low heat
now is ready

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Q. Douglasii? *Q. Harryana*? (White oak, deciduous lobed leaves). -
Monte Sella; May 1862
Q. Douglasii? very common here, often 3 ft. in diam., but
generally less. Timber considered the hardest
and toughest of any here. Ship builders use it.
Called here "Mountain White Oak". It grows over
the foothills, while *Q. Hinddii* keeps the plains
& valleys. Many trees retain their old leaves until
the new make their appearance - becoming almost
evergreen.



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lined with white, the white) I, and placed
in the sun, it dried out
and turned yellow.
I think it was due to the following
cause. It was about 100° F. and following
the sun about 100° F. and
then away to "not much warmer" and turned
yellow at first with a white, after being left
there about 10° with water not much quiver +
shakes - seems to melt when left
uncovered.

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Memoranda - Walnut Creek, May 1. 1862

Q. California, a fine tree on ridge measures
10 ft. 4 in. in circumferencia.



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Mem² Mt. Diablo. - May 6-25. 1862

R. agnifolia. - just flowered in valleys, in flower
on the hills. One measured 16 $\frac{1}{2}$ in circ.
cuneiform, with head of drum of Major
120 ft. in diameter. Near the book, the
finest specimen of the species.



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SD 1, K-D part. 26 of 100

100

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Marsh's Ranch. near Moate Diablo May 1862

Clobata Q. Hindin covers plain by the house, a widened
cañon, making a lovely park, many of the
trees perfect subjects for the painter. The
following measurements were made 3 $\frac{1}{2}$ feet
from ground. - 18 $\frac{1}{2}$. - 16 $\frac{1}{2}$. - 15 $\frac{1}{2}$. - 15 $\frac{1}{2}$. - 14 $\frac{1}{2}$. - 17 $\frac{1}{2}$. -
17 $\frac{1}{2}$. - 17 $\frac{1}{2}$. This was cut down and was about 260.
years old. In the last 100 yrs. only 6 in. has been added
to the radius. A limb 22 in. through, was 17 $\frac{1}{2}$ yrs. old.
- 21 $\frac{1}{2}$. About 100 to 110 ft. high. Had a diameter
of head of 12 $\frac{1}{2}$ ft. and was perfectly symmetrical.
16 $\frac{1}{2}$. - 15 $\frac{1}{2}$. - 20 $\frac{1}{4}$ most magnificent tree, 80 to
90 ft. high, and had 100 ft. in diameter, the limbs
drooping on all sides in great arches, some
touching the ground. - 16 $\frac{1}{2}$. - 14. - 14 $\frac{1}{2}$. - 19 $\frac{1}{2}$. - 16 $\frac{1}{2}$. -
15 $\frac{1}{2}$. - 15 $\frac{1}{2}$. - 20 $\frac{1}{2}$. - 16 $\frac{1}{2}$. - 14 $\frac{1}{2}$. - 16 $\frac{1}{2}$. - 20 $\frac{1}{2}$. - 15.



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This image shows a severely damaged page from a ledger or account book. The paper is heavily stained with dark, mottled marks, likely from water damage. The text is mostly illegible due to fading and the nature of the damage. A faint, horizontal line of text is visible near the bottom center, which appears to read "Dr. exp'd on J. M. Smith & Son, May 1st 1861".

~~200 with mounting base 4° 05' - 21 - 15'~~



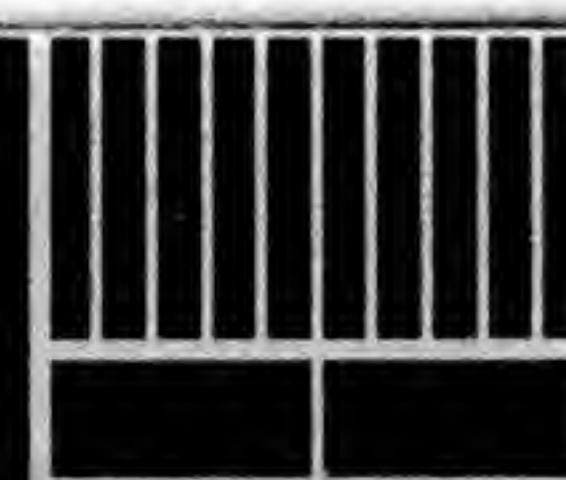
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Douglasia ? On north slopes of Metamorphic
hills. Many 2 or 3 ft. in diam. A number
measured 8 to 9 1/2 ft. in girth. Not a low tree,
bark light, rather smooth (not deeply furrowed).
Habit so open that it does not cast a dense shade.



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L. 14
S. 14
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and it is good
and moist for seeds to germinate
and grow well. This is a typical community
(among others) it grows with other, taller trees
such as trees like oak, birch and maple.



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North of Hollenbacks. June 26.¹⁸⁶² *G. Hindii* grows
over the hills to 1500 ft. alt. above camp, with
G. agrifolia & *G. Garryana*. About 21 Mile
House many trees of *G. Kelloggii*, *G. Hindii*
and *G. Garryana agrifolia*, all large - and

June 25 on
Pachero's Peak
East of Monterey
to Monte Diablo
Range *G. Garryana* only seen on the dry gravelly
wash from metamorphic hills, especially
siliceous gravel. Many *G. agrifolia* over of
immense size, one measuring ~~about~~ 21 ft. in
girth, and several others over as large or larger.
Forage deer.

1314 oppd

1321



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This is a
new
species

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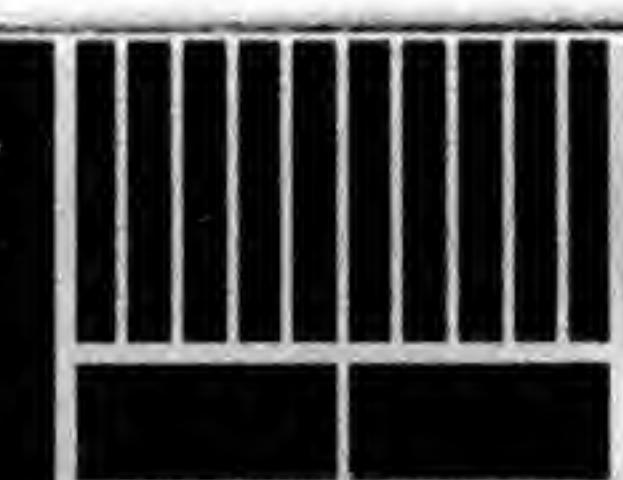


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1462. ^{not found} Acorns of *G. Garryana*. near Shasta.

-1463. coll " " from large tree in valley
of Cow creek. All the acorns on the
tree were of this shape.
^{near Shasta}

1464. ^{not - Col} Acorns of *G. Garryana* from dry lava and ash
hill near Cow Creek. all on the tree
of this shape, but the foliage essentially
the same as on the trees from which
the preceding were taken. Acorns all plan-
cosus with bluish bloom.



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1465. ^{coa}Acorns of *Q. trinervia* from Sac^o Valley near River
Ferry. This is the characteristic form of
the acorns of this species seen
here.

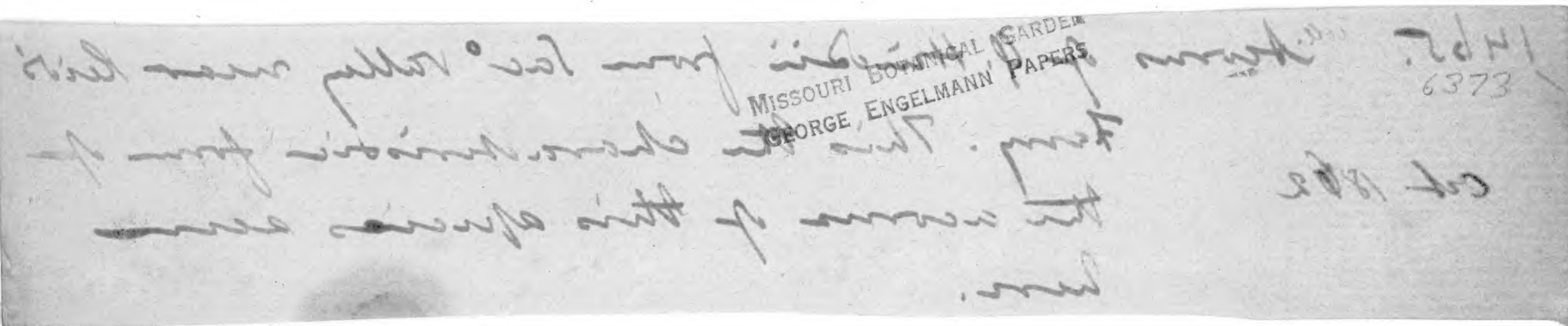


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1476. Near Napa. - *Q. agrifolia*, fruit. This the common
~~form of H. b.~~
form on the tree. A small tree was seen
near Sonoma with short curved acorns,
like a certain form seen on a tree
near Battle Creek.

1477. Sonoma Valley. - Oct. 29. *Q. kelloggii*. Acorns.



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March 1865 Q. *Californica* ^{*Sierrae*}. Black Oak. But just coming into flower
New Almaden + least at mouth of canions, but entirely bare on
the hills. Abundant on sandstone ridges at 2,000
to 3,000 ft. alt. Often over 5 ft. through. Bark almost
black.



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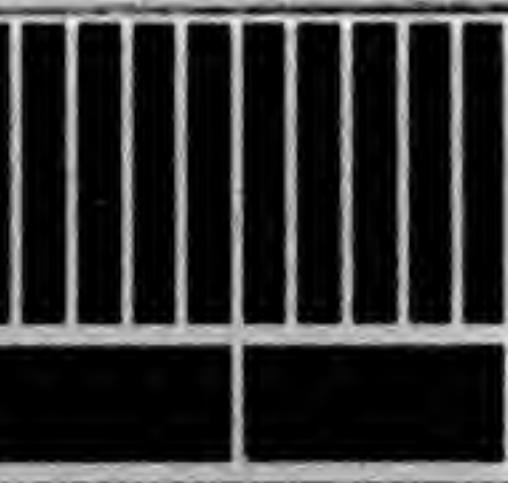
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March 1863 Q. fulvissimum. Sacagawea Mts. Acorns & cups gen.
nally smaller than seen above Shasta.
Cups very fulvous.



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165 Ban Galito no.
q. dumosa on North or shady side of
hill in Cañon - Shrub 20
feet high - quite
abundant - stems much
branched - bark very like that
of *L. alba* on trees of 4 or 5
inches in diameter or of same
diameter as shrub.



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1491, 1492 on mosses. Probably should be 1091,
1092.

2700 }
2916 } I have no clue to.
4650 }

I can give you localities
for *Bolanderia numerosa*, if you
wish.



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1901 - Wherry's *glossy*
spot

seen in 1901, 1901
⁶³⁷⁸



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occas
dips
old

introduced by Virginia
P. and Anna Elizabeth H.
Brown



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Herb. - At Red Bluff and north to Shasta in *q. agri-*
folia seen. Much *q. Gambelii* ^{yarrowine} about Red
Bluff and over all the gravelly table
lands to Shasta, on the dry hills, or. Timber
called very bushy by everybody. But
little *q. Hindii* seen.



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1420. Mr. Sharska.- sp? "Castanea". Forms large
patches like chaparral, 2 to 5 ft. high,
with fruit & flowers on same bush.
forage very brushy in canyons where
upper & lower sides. 3-6,000 ft. alt.



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6380

Sp. nov. "annulosa" 1962 - 2. MM 05 N
1962-11-5, New York City
Hand made on sweet potato
and horse in New York
No. 14000-2. Also made to

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Oct. 10. Near the Argus River (about Eureka) over the moun-
tains is much oak chaparral, with leaves
^{x63}
like *Q. Hindii*. *Q. Hindii* is in the valley
of Cottonwood Creek with enormous
acorns; plant very large in comparison
with the cups.

In the cañon of Klamath R., between Scotts River
+ Hopping Camp, the oaks are *Q. California*,
Q. fulva, ^{*Sonomensis*} & *Q. Hindii*



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George Engelmann
1811-1896
Lecturer in Botany in the
University of Missouri
1843-1853



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Near New Almaden. — Mar. 5. 1863

Oak. (the var. of *agnifolia*? with glabrous ovate leaves)

Q. wislizenii? seen on ridge near Uvas Creek, 12 $\frac{1}{2}$ in girth. Aa.

6 ft. from ground measured 9 ft. acorns comical
polished, striped.



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6382

581 - var - whorled with "var"
and more crowded than ^{the} ^{var} of var. aff. Mol
fig. i 1/51 used with var. ^{MISSOURI BOTANICAL GARDEN}
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leaves much ^{1/2} pinnate long narrow. sp. 2
united, but not



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then. - *G. agnifolia*, now putting forth a second growth
~~1886~~ <sup>July 19th this year, - hairs of the first matroned, second
June 19th¹⁸⁸² small. It could not be observed that more
than one ring of wood was formed. Young branch.</sup>

Pacheo Pass?

Leaves of this year's growth covered with stellar pubescence. This also found sparingly on under
sides of leaves, but far more abundantly in
the axils of the lower large veins. The pubes-
cence appears to be shed during the summer,

The pubescence of *G. Garyana* differs in
being finer and branched, but more stellar.
The leaves of the latter are more pubescent
on both surfaces, although the upper
surface is covered with a blue-green bloom.



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the long leaves, the petioles have, with you, I think
longer, broader than the broad ones, up into
your 1 ft. annuals & the leaves to. Name ^{Sp.} ~~Sp.~~
I don't know. Leaves can grow to give us more
helleborine leaves, often, & the ~~leaves~~ ^{leaves} ~~helleborine~~
have a slight ring of hair around the
leaf-blade below & the ~~edge~~ ^{edge} of the
leaf. This is good for ~~the~~ ^{the} ~~leaves~~ ^{leaves}

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in office now. I am sending up
what little you need, but won't be writing it
now until you've got the ~~leaves~~ ^{leaves} &
then I'll get it & write, so as to be
with you next time you're in town



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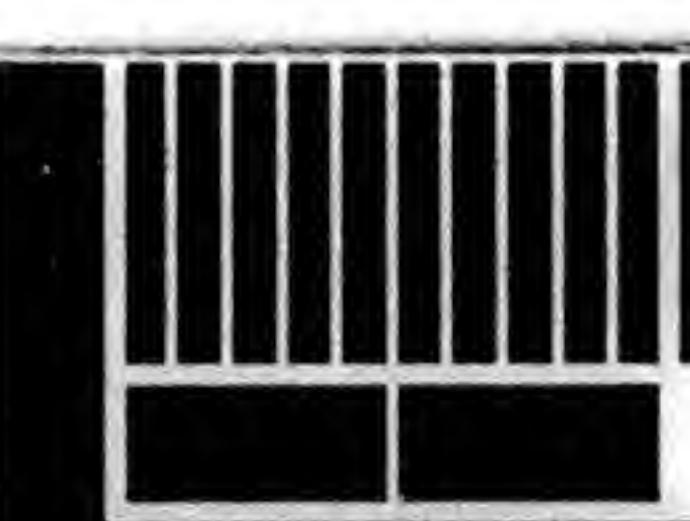
Mem. Among the prevailing trees of the ^{Yosemite} valley are
June 18 1863 *Q. californica* (Kelloggii) very large; and *Q.*
fulva ^{scens}, mostly in ravines.

Mem. July 19. (Coming across the Sierras by Sonora
Pass, down the Stanislaus to bridge at 5,500-6,000 ft. alt.)
Q. californica first seen 500 ft. above camp, & not
rare here.

July 22. Came on to head of Sugar Pine Creek through
forests of sugar + pitch pine - 2 species of *Picea*-
& Black Oak sparingly.

July 23. Came on to Sonora - at 9 to 10 miles back of
Sonora came first to ^{Douglasii?} *Q. hinnymana*, on dry
hills.

July 29. From Murphy's to Big Trees. *Q. californica*
all the way. Chapparal oak on the hills. No *Q.*
fulva seen. (G. amabilis?)



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100 miles from the coast, ^{and} I am willing to guess
 it has just one (imported) winefield. ^{the old}
 wine is yellow, ^{and} looking
 more & more like ours ^(ours pink). It's ^{more}
 (most) wood over to right & no airport ^{on} road, ^{but}
 car to ^{the} ~~monuments~~ ^{one} big winefield.
 . and more
 sprout shrub with ^{pink} flowers & we can't see any
 kind of ^{pink} flowers - ^{nothing} ^{seen} ~~nothing~~
 winefield to
 & that wine is ^{pink} to - ^{yellow} & so ours. ^{as} plus
 water, ^{which} ^{is} ^{nothing} ^{of} to this ours wine.
 . about
 winefield. ^{and} and just a ^{little} ^{more} ^{for} plus
 & ^{it} ^{is} ^{about} ^{the} ^{old} ^{imported} ^{now} at the
^{old} ^{monument}



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Oct. 25. Visited a tanner a few miles E. of Wald, Josephine
Co., Oregon. He uses Black oak bark (*Q. Calif.*^{Sonomensis}), which
is thicker than the white oak bark used east. It
makes firm leather, but is darker than that tanned
with the E. white oak. A mixture of *A. Douglasii* makes
hairier leather. The white oak of this region has too
Juglans?
much thick outer bark, often 3 to 5 inches. Many white
oaks in the valley with thick round acorns, very white
colored bark (like *Q. alba*), leaves glossy above, but habit of trees
precisely like *Q. Hindsi* in Calif.



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1449. Stream near San Jose. - Spec. 5. - *P. amplexicaule*.
prevailing form - & acornous here.



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